

REMARKS

I. INTRODUCTION

Claims 1-16 were previously cancelled without prejudice of the subject matter recited therein. Claims 17-28 and 34-38 were previously withdrawn pursuant to the August 20, 2009 Restriction Requirement. Applicants reserve the right to pursue the subject matter of cancelled and/or withdrawn claims in one or more continuing applications. Independent claim 29 has been amended to clarify the subject matter recited therein. Accordingly, claims 29-33 are under consideration in the present application.

Provided above, please find a claim listing indicating the current amendments to the claims and the status of other claims on separate sheets so as to comply with the requirements set forth in 37 C.F.R. § 1.121. It is respectfully submitted that no new matter has been added. Exemplary support for the amendments in independent claim 29 as set forth herein above is provided in the originally-filed specification. (See e.g., Substitute Specification, ¶¶ [0038], [0040], and [0049]).

Reconsideration of the present application in view of the above amendments and the following remarks is respectfully requested.

II. REJECTIONS UNDER 35 U.S.C. § 103(a) SHOULD BE WITHDRAWN

Claims 29, 32, and 33 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 6,539,765 issued to Gates ("Gates") in view of Japanese Patent No. 06-210370 to Tamada et al. ("Tamada"). Claims 29 and 32 stand rejected under 35 U.S.C. §103(a) as allegedly being allegedly unpatentable over

Japanese Patent No. 2002-282951 to Sudo et al. ("Sudo") in view of Tamada. Claim 30 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over either Gates or Sudo in view of Tamada, and further in view of U.S. Patent No. 4,945,381 issued to Yamagata et al. ("Yamagata").

Applicants respectfully assert that the cited references fail to teach or suggest the subject matter of amended independent claim 29, and the claims that depend therefrom, for at least the following reasons.

"To reject claims in an application under Section 103, an examiner must show an un rebutted *prima facie* case of obviousness." *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998). The Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated:

Under Section 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Indeed, to sustain a rejection under 35 U.S.C. § 103(a), there must be some teaching, other than the instant application, to alter the prior art to arrive at the claimed invention. "The problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem." *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 679 (Fed. Cir. 1998).

The objective standard for determining obviousness under 35 U.S.C. § 103, as set forth in *Graham v. John Deere, Co.*, 383 U.S. 1 (1966), requires a factual determination to ascertain: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; and (3) the differences between the claimed subject matter and

the prior art. Based on these factual inquiries, it must then be determined, as a matter of law, whether or not the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the alleged invention was made. *Graham*, 383 U.S. at 17. Courts have held that there must be some suggestion, motivation or teaching of the desirability of making the combination claimed by the applicant (the "TSM test"). See *In re Beattie*, 974 F.2d 1309, 1311-12 (Fed. Cir. 1992). This suggestion or motivation may be derived from the prior art itself, including references or disclosures that are known to be of special interest or importance in the field, or from the nature of the problem to be solved. *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996).

Although the Supreme Court criticized the Federal Circuit's application of the TSM test, see *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, (2007) the Court also indicated that the TSM test is not inconsistent with the *Graham* analysis recited in the *Graham v. John Deere* decision. *Id.*; see *In re Translogic Technology, Inc.*, No. 2006-1192, 2007 U.S. App. LEXIS 23969, *21 (October 12, 2007). Further, the Court underscored that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR*, 127 S. Ct. at 1741. Under the precedent established in *KSR*, however, the presence or absence of a teaching, suggestion, or motivation to make the claimed invention is merely one factor that may be weighed during the obviousness determination. *Id.* Accordingly, the TSM test should be applied from the perspective of a person of ordinary skill in the art and not the patentee, but that person is creative and not an automaton, constrained by a rigid framework. *Id.* at 1742.

However, "the reference[s] must be viewed without the benefit of hindsight afforded to the disclosure." *In re Paulsen*, 30 F.3d 1475, 1482 (Fed. Cir. 1994).

The prior art cited in an obviousness determination should create a reasonable expectation, but not an absolute prediction, of success in producing the claimed invention. *In re O'Farrell*, 853 F.2d. 894, 903-04 (Fed. Cir. 1988). Both the suggestion and the expectation of success must be in the prior art, not in applicant's disclosure. *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1207 (Fed. Cir. 1991) (citing *In re Dow Chem. Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988)). Further, the implicit and inherent teachings of a prior art reference may be considered under a Section 103 analysis. See *In re Napier*, 55 F.3d 610, 613 (Fed. Cir. 1995).

Secondary considerations such as commercial success, long-felt but unsolved needs, failure of others, and unexpected results, if present, can also be considered. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538-39 (Fed. Cir. 1983). Although these factors can be considered, they do not control the obviousness conclusion. *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988).

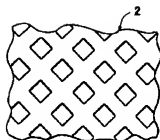
To establish obviousness, the prior art references must be evaluated as a whole for what they fairly teach and neither the references' general nor specific teachings may be ignored. *Application of Lundsford*, 357 F.2d. 385, 389-90 (CCPA 1966). A reference must be considered for all that it teaches, not just what purportedly points toward the invention but also that which teaches away from the invention. *Ashland Oil, Inc. v. Delta Resins & Refractories*, 776 F.2d. 281, 296 (Fed. Cir. 1985).

Independent claim 29 has been amended above to recite, in part, an apparatus for press molding a heated metal plate material including **a plurality of projections**

"such that the cooling medium is circulated through gaps between the mold and the metal plate material forcibly so as to cool the mold and a molded piece" and where the projections are "disposed in at least one recess which is structured to prevent marks of the projections to be transferred to the heated metal plate material." As indicated herein above, exemplary support for such recited (and amended) subject matter can be found throughout the originally filed disclosure. (See, e.g., Substitute Specification at ¶¶[0038], [0040] and [0049]). It is respectfully submitted that the cited references, alone or in combination, fail to teach or suggest at least these features recited in independent claim 29.

In the Office Action, the Examiner admits that Gates and Sudo do not teach the plurality of projections recited in independent claim 29, and attempts to cure this deficiency with Tamada. (See latest Office Action, p. 3, Ins. 18-22; and p. 3, Ins. 17-21). Applicants respectfully disagree.

Tamada describes a press-forming public-funds type that prevents generating shaping faults such as cracks by confining a lubricating oil between the metallic mold surface and a press material. (See Tamada, ¶[0006]). The lubricating oil is confined in the individual crevices formed with a small curvature in limited areas over the mold surface, such as in areas A-F shown in Figure 1, to prevent generation of cracks in the press material. (See Tamada, ¶¶[0009], [0010], and [0014]; Figure 1). As shown in Figure 3 of Tamada (reproduced below), the oil is confined to the



individual diamond-shaped crevices formed on the surface of the mold. As described in Tamada, these crevices have a given diameter, and are not connected to one another. (See Tamada, ¶[0010]; Figure 3).

In contrast, amended independent claim 29 recites that projections: (a) provide gaps that allow circulation of cooling material; and (b) are disposed in at least one recess which is structured to prevent marks of the projections to be transferred to the heated metal plate material. Further, as described in the specification of the present application, e.g., these projections can, for example, reduce the area of contact between the mold and the metal plate material preventing excessive cooling of the metal heat material from heat transfer and increase cooling efficiencies of the mold and the metal plate when a cooling medium is circulated through the gaps. (See, e.g., Substitute Specification at ¶[0038]). Tamada is limited to a mold having individual crevices that confine lubricating oil in the individual crevices to prevent cracks, and does not teach, suggest, or even contemplate **projections that provide gaps to facilitate a circulation of a cooling medium**, as recited in amended independent claim 29.

Additionally, amended independent claim 29 recites that **the projections are disposed in at least one recess which is structured to prevent marks of the projections to be transferred to the heated metal plate material**. Tamada also fails to teach, suggest, or contemplate this feature recited in independent claim 29.

Further, none of Yamagata, Gates, nor Sudo cure the deficiencies of Tamada, and the Examiner does not contend that they do. Accordingly, for at least the reasons discussed above, combinations of Gates, Tamada, Sudo, and Yamagata do not render independent claim 29, or dependent claims 30-33 obvious. Withdrawal of the rejection of claims 29-33 under 35 U.S.C. § 103 based on combinations of Gates, Tamada, Sudo, and Yamagata is respectfully requested.

IV. CONCLUSION

In light of the foregoing, Applicants respectfully submit that the pending claims are in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited. The Examiner is invited to contact the undersigned to expedite the prosecution of this application if any issues remain outstanding.

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